

CLAIMS

1. A compressor wheel assembly comprising a compressor wheel mounted to a rotating shaft, the shaft extending through a bore provided along the rotational axis of the wheel, wherein the bore has a first axial portion corresponding in diameter to the diameter of the shaft, and a second axial portion of enlarged diameter, such that the inner surface of the second portion of the bore is radially spaced from the shaft.
2. A compressor wheel assembly according to claim 1, wherein an internal radial shoulder is defined between said first and second axial portions of the bore.
3. A compressor wheel assembly according to claim 1, wherein there is a gradual increase in bore diameter between said first and second axial portions of the bore.
4. A compressor wheel assembly according to claim 1, wherein said first axial portion of the bore extends from one axial end surface of the compressor wheel.
5. A compressor wheel assembly according to claim 1, wherein a cylindrical sleeve is located around said shaft extending radially between the inner surface of the second portion of the bore and the outer surface of the shaft.
6. A compressor wheel for mounting to a rotating shaft of predetermined diameter, the compressor wheel being provided with an axial through bore for receiving an end of said shaft, wherein the through bore has a first axial portion corresponding in diameter to said predetermined diameter of the shaft, and a second axial portion of greater diameter than said predetermined diameter of the shaft.

7. A compressor wheel according to claim 6, wherein a cylindrical sleeve is fitted within the second portion of the bore, the sleeve having an internal diameter corresponding to the diameter of the first portion of the bore.

8. A turbocharger comprising a turbine wheel mounted to one end of a shaft for rotation within a turbine housing, and a compressor wheel mounted to the other end of the shaft for rotation within a compressor housing, the compressor wheel having an axial through bore extending between a first axial surface of the wheel and a second axial surface of the wheel, said second axial surface facing away from said turbine, wherein the bore has a first axial portion of internal diameter corresponding to the diameter of the shaft and a second axial portion of enlarged diameter, such that the inner surface of the enlarged diameter portion of the bore is radially spaced from the shaft, and wherein said first axial portion of the bore extends from said first axial end surface of the compressor wheel part way towards said second axial end surface of the wheel.